



CITY OF DURHAM | NORTH CAROLINA

Date: March 17, 2015

To: Thomas J. Bonfield, City Manager

Through: W. Bowman Ferguson, Deputy City Manager

From: Joel V. Reitzer, Jr., Director, General Services Department

Subject: Change Order to Address Modifications to the Masonry Scope of Work for 400 Cleveland Street Roof and Envelope Renovations Contract with L.A. Downey and Son, Inc.

Executive Summary

The 400 Cleveland Street Roof and Envelope Renovations project is currently under construction and about 60% complete. Early in construction, selective demolition revealed a number of construction inadequacies original to the building. These were scoped and presented to Council as a change order in the fall. Since that time, additional unforeseen conditions prompted a more thorough investigation. That investigation revealed three new issues that need to be addressed:

- Through-wall flashing needs to be reinstalled in additional areas of the building.
- Steel angles that support the brick in these areas are too short, do not provide adequate support for the brick, and need to be extended.
- A portion of the solid masonry wing wall at the southwest corner of the building needs to be reconstructed, due to poor construction through the depth of the wall. The foundation of this wall also needs to be stabilized.

A change order to LA Downey's contract is presented here to correct these issues, extending the construction schedule into June 2015. Additionally, because of the number of unforeseen conditions and the generally poor quality of the original brick work, staff recommends maintaining a higher than normal contingency on the project.

Recommendation

The General Services Department recommends that the City Council:

1. Authorize the City Manager to execute a change order to the construction contract for the 400 Cleveland Street Roof and Envelope Renovations project with L.A. Downey and Son, Inc. in the amount of \$105,898.00, so that the total contract amount will not exceed \$603,212.00.
2. Restore the project contingency to 10% of the total construction contract amount, for a contingency of \$60,300 and authorize the City Manager to negotiate and execute change orders on 400 Cleveland Street Roof and Envelope Renovations construction contract, provided the total project cost does not exceed \$663,512.00.

Background

The Durham Parks and Recreation Department's core administration functions are housed at 400 Cleveland Street. The building is slab on grade, framed in steel with CMU walls and a brick veneer. The roof system consists of a steel framing system with a steel roof deck, insulation and a single ply PVC covering, with a total roof area of 8,970 square foot. In FY 2012-2013, the City Council approved a Capital Improvements Program (CIP) project in the amount of \$600,000.00 for the replacement of the existing roof and other envelope improvements at 400 Cleveland Street to address ongoing water intrusion problems. The 400 Cleveland Street Roof and Envelope Renovations construction project bid on March 18, 2014, and the contract was awarded to L.A. Downey and Son, Inc. The base scope of work was bid at \$420,169.00 and included a new flat roof assembly for the facility, tuck-pointing and application of brick sealant to the entire building, replacement of the exterior stair, and replacement of sealants at all doors and windows. In addition, four alternates were accepted, for a total contract value of \$446,699.00.

Shortly after the initiation of construction, the designer identified that through-wall flashing typically found at the base of the roof parapet is either missing or too short, and contributing to some of the masonry concerns around the top of the building. Change Order 2 included scope to correct this deficiency, and was approved by City Council on January 5, 2015. This change order added the flashing and decreased some of the less essential tuck-pointing masonry work to offset some of the additional cost.

Since that time, it was discovered that the same through-wall flashing deficiency is present in additional areas of the building, and the steel angle brick supports have been found to be too short to properly support the brick. As a result of these additional findings, the contractor has investigated many suspect areas around the building, in order to get as much information as we can, before moving forward with the repairs.

More investigation has been performed to the wing wall at the southwest corner, revealing poor back-up brick in the top portion of the four-wythe, solid brick wall. To correct the issue, the wall needs to be shored for temporary stabilization and the four wythes rebuilt properly. The foundation of this wall also needs to be stabilized.

The proposed change order also includes new signage around the building, identifying it as the Durham Parks and Recreation building, rather than the Employee Training Center. This more accurately reflects the current use of the building, since the Human Resources department has vacated the lower level and Parks and Recreation will now occupy that space.

Issues/Analysis

The flashing issue was discovered once construction started, when an exterior wall was opened up for a more thorough examination. Further investigation around the building has revealed additional issues in the building envelope. It's essential to the long term well-being of the facility to properly address these issues. Over time it has allowed water infiltration into the exterior wall, pushing mortar out of the joints, leading to further deterioration of the masonry and allowing water into the building. Combined with the short brick angles, if not properly repaired, the situation could develop into a life safety issue with unstable brick.

Because of the issues discovered in the building envelope, and the opportunity for additional issues as we move forward with the masonry repairs, it is recommended to maintain the current amount of contingency for the remainder of the project.

Alternatives

One alternative is to decrease the scope to the exterior wall renovations to within what has already been approved by Council. Staff recommends against this alternative as additional funds remain in the project to cover most of the issues. Postponement of this renovation will result in continued degradation of the building envelope, continued costs for repairs and, potentially, a life safety issue with unstable masonry.

Additional funding to cover the gap is available in deferred maintenance, as additional funds were encumbered to the Conley Group's design contract to anticipate future roof and envelope work in the City. Instead, funding needed for future design work will be sought at the same time that construction funds are requested.

Financial Impacts Project Funding Sources

Bond Proceeds	3301C990 - CC240	\$600,000
Deferred Maintenance	0C200000 - 723500	\$138,338
Total Project Funding		\$738,338

Funding Uses Summary

Prior:		
Building Assessment	0C200000 - 723500	\$19,300
Design, Construction Administration	0C200000 - 723500	\$55,500
COA Application	3301C990-731000-CC240	\$26
Construction Contract	3301C990-731000-CC240	\$446,699
Construction Change Order #1	3301C990-731000-CC240	\$4,471
Construction Change Order #2	3301C990-731000-CC240	\$46,144
Total		\$572,140
Current:		
Construction Change Order #3	3301C990-731000-CC240	\$102,660
	0C200000 - 723500	\$3,238
Construction Contingency	0C200000 - 723500	\$60,300
Total Financial Impact		\$166,198

Funding Uses Total		\$738,338
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SDBE Summary

This item is a change order and was not reviewed by the Department of Equal Opportunity /Equity Assurance for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.